



**KANSAS NSF ESTABLISHED PROGRAM  
TO STIMULATE COMPETITIVE RESEARCH  
(EPSCoR)**

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***REQUEST FOR PROPOSALS:***

**RESEARCH &  
EDUCATION  
INNOVATION (REI)  
AWARDS**

**In Microbiome Research**

**Submission Deadline: Friday, June 29, 2018**

## Program Name

Kansas National Science Foundation Established Program to Stimulate Competitive Research (Kansas NSF EPSCoR) Research & Education Innovation (REI) Awards

## Project Director

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## Source of Funds

The source of funding for REI Awards is Kansas NSF EPSCoR, which receives its funding from the current National Science Foundation Established Program to Stimulate Competitive Research (EPSCoR) Research Infrastructure Improvement (RII) Track-1 award (OIA-1656006). Matching support is provided by the Kansas Board of Regents (KBOR) and the participating universities.

## Focus Area

The current RII Track-1 award funding REI Awards is titled *Microbiomes of Aquatic, Plant and Soil Systems (MAPS) across Kansas*. Broadly, MAPS' mission is to elucidate how microbiomes interact within native and agriculturally dominated aquatic, plant, and soil habitats, leveraging the steep precipitation gradient across Kansas as a means of projecting system response to environmental change. To this end, this elucidation will provide a vehicle for education, training, and outreach that includes informing policymakers and managers. **Only projects with research in areas that are related to the current Kansas NSF EPSCoR focus of microbiomes as broadly construed to be in aquatic, plant and/or soil systems (<http://www.nsfepscor.ku.edu>) are eligible for REI Awards.**

## Purpose

Kansas NSF EPSCoR helps Kansas build its research capacity and competitiveness in science and technology in the RII Track-1 MAPS focus area. REI Awards are for small projects that will either allow for networking and planning or for the immediate pursuit of larger projects for developing new transformational concepts. These are awarded for both research and education, given their close relationship. These awards are in the same spirit as and share goals with NSF EAGER (Early Concept Grants for Exploratory Research) awards, for high risk/high gain research ideas.

Kansas NSF EPSCoR seeks to:

- add significant and measurable value to the research capability at its participating institutions;
- generate sustained non-EPSCoR funding from federal, state, or private sector sources;

- increase multidisciplinary, multi-institutional and multi-sector collaborations that will lead to long term sustainable funding;
- increase diversity by enabling participation in the project's activities by women and men, underrepresented minorities, and persons with disabilities to the extent possible within the scope of the project; and
- develop stronger linkages between research and education.

### **Examples of Eligible Activities**

Below are *examples* of Research activities consistent with the Kansas NSF EPSCoR program objectives.

- Exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches in the area of MAPS. This work may be considered especially "high risk-high payoff" in the sense that it, for example, involves radically different approaches, applies new expertise, or engages novel disciplinary or interdisciplinary perspectives.
- Development of large (budgets  $\geq$  \$1,000,000), collaborative multi-investigator, multi-disciplinary, research proposals to the NSF by providing opportunities for research collaborators to
  - meet, explore ideas, and plan proposals in areas related to MAPS; and/or
  - organize a symposium for local, regional or national meeting where collaborators could provide talks and posters in areas related to MAPS. Inclusion of some collaborators from non-university employers, such as National Laboratories or industry, is strongly encouraged.
- Initiatives that expand and add significant value to the specific areas of the MAPS research project in novel ways not previously considered.

Below are *examples* of Education activities consistent with the Kansas NSF EPSCoR program objectives.

- Innovations in education that will expand student career options and facilitate the entry of members of underrepresented groups within the state (i.e., minorities, women and persons with disabilities) into STEM fields in areas related to MAPS.
- Partnerships with other universities, four-year colleges or community colleges in Kansas that provide educational and/or research opportunities in areas related to MAPS for faculty and/or students.
- Development of materials, collections, presentations, or media in areas related to MAPS that extend STEM educational opportunities to targeted segments of the Kansas population.
- Design and implement programs that overcome barriers to existing educational resources in STEM in areas related to MAPS.
- Professional development programs or other initiatives to enhance K-12 education in STEM in areas related to MAPS.

- Programs that introduce K-12 students to STEM fields, such as a science summer camp in areas related to MAPS.
- Educational exhibits/presentations related to MAPS that reach large numbers of Kansas stakeholders or broaden the engagement of the public.

### **Eligibility**

Eligible to apply is any individual with PI status at Kansas State University, University of Kansas, Wichita State University, Emporia State University, Fort Hays State University, Pittsburg State University or Washburn University.

### **Award Amount and Duration of Award**

An individual Principal Investigator may submit a total project budget of up to \$50,000 in direct costs for up to 12 months. It is expected that Kansas NSF EPSCoR will fund as many as four REI Awards depending upon the size of the requests. Awards to PIs at Kansas State University, Wichita State University, Emporia State University, Fort Hays State University, Pittsburg State University and Washburn University will be administered as subcontracts; KUCR accounts will be established for PIs at the University of Kansas. The start date will depend upon the timing of the proposed activities.

### **Application Procedure**

Prepare the REI Award proposal in accordance with the general guidelines contained in the *Proposal and Award Policies and Procedures Guide*, part 1: *Grant Proposal Guide (GPG)*, NSF 17-1. Exceptions are noted below.

- a. **Required for science proposals only:** provide the name, affiliation and contact information for three suggested reviewers outside of Kansas – reviewers should not have a conflict of interest (as defined by NSF) with the project PI or any senior personnel
- b. The project description may be from two to seven pages. Research proposals may need to be closer to the seven page limit in order to provide sufficient detail. The project description should describe:
  - i. The purpose and rationale for the initiative and its relation to microbiome research.
  - ii. Specific goals and expected outcomes.
  - iii. The proposed activities and how they will achieve the specific project goals and the purpose of REI Awards (See “**Purpose**,” page 2)
  - iv. The purpose of the meeting or symposium (as appropriate for proposal planning activities only), and provide a draft agenda and draft list of participants. Describe how the meetings and symposia will facilitate the development of a full proposal to NSF.
  - v. A method for evaluating project success/student outcomes (as appropriate for education activities only).

- c. Prepare the proposal budget using the Kansas NSF EPSCoR Budget Form that appears on the Kansas NSF EPSCoR Web site. The REI Award budget **should**:
- Support activities that can be accomplished as described in the project description
  - Be followed by budget justification of up to two pages in length
  - Be followed by a one-page timeline with milestones for completing the scope of work and expending the funds requested. An example appears on the Kansas NSF EPSCoR Web site

The REI Award budget **should NOT**:

- Exceed \$50,000 in direct costs
- Include PI salary
- Include subawards or support for Co-PIs or other senior personnel
- Include any indirect costs (F&A will be added when a proposal is awarded)

The proposal must be prepared as described above as a single PDF. The PDF should be submitted electronically as an email attachment sent to [nsfepscor@ku.edu](mailto:nsfepscor@ku.edu) by 5 PM, Friday, June 29, 2018.

### Review Criteria

In reviewing proposals, Kansas NSF EPSCoR uses the general merit review criteria established by the National Science Board. These are discussed in the *Proposal and Award Policies and Procedures Guide*, part 1: *Grant Proposal Guide (GPG), NSF 17-1* and listed below. In responding to NSF's **Broader Impacts** criterion, reviewers will be asked to place special emphasis on the likelihood that the proposed project will enhance the research competitiveness and/or infrastructure of the state and how it contributes to the Kansas NSF EPSCoR microbiome focus area. Proposals for activities that show the greatest potential for long-term impact on enhancing research and education in microbiome focus areas in Kansas will receive priority.

When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to:
  - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
  - b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

#### **General Conditions of Award**

If a proposal is selected for funding, the Project Director reserves the right to negotiate the budget and the term of the award.

During the term of the award and for five years after the end date, the Principal Investigator must inform the Project Director of:

- Any proposals submitted and any awards received as a result of the award. Information provided should include the title of the proposal or award, the funding agency, the amount of the proposal or award, and its duration.
- Changes in the Principal Investigator's contact information.

Because Kansas NSF EPSCoR is part of the National Science Foundation EPSCoR, it must comply with NSF EPSCoR reporting requirements. Therefore, each REI Award Principal Investigator will be required to submit an annual report identifying *the numbers of women and members of other underrepresented groups in STEM fields participating as faculty, staff, graduate students, or undergraduate students in the activities funded by the award (NSF 16-557)*. Other required information will include demographics on all project participants, proposals submitted and funded, publications, presentations, patents, degrees granted, and research outcomes. Kansas NSF EPSCoR will request information from award recipients with compliance expected within 30 days of the request.

Any publication resulting from the award must include the following statement of acknowledgment: *This research is based upon work supported by the National Science Foundation under grant no. OIA-1656006 and the State of Kansas through the Kansas Board of Regents.*

The Principal Investigator will be expected to attend any Statewide EPSCoR Conference scheduled during the award period.

**Contact Information**

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**Questions**

Questions about this RFP may be directed to Doug Byers, Assistant Director, at 785-864-3227 or [dbyers@ku.edu](mailto:dbyers@ku.edu).

**Kansas NSF EPSCoR Budget Form**

See the Kansas NSF EPSCoR Web site: <http://www.nsfepscor.ku.edu/funding.html>